

# Vienna Instruments

## Trumpet in Bb (mute)

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## Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Vienna Instruments! This document contains the mapping information for the Vienna Instruments Trumpet in Bb (mute). You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

## Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary. Here's an overview of the articulations/Patches contained in this Collection:

**Short notes:** Staccato, portato short and medium

**Long notes:** Sustained with normal, progressive, and without vibrato; marcato; upward slides with and without vibrato; falls

**Dynamics:** Medium and strong crescendo and diminuendo (4 durations each); crescendo-diminuendo with and without vibrato (4 durations each); fortissimo, sforzato, sforzatissimo

**Flutter tonguing:** Normal and crescendo

**Interval performances:** Legato with normal, progressive, and without vibrato, portamento tight and loose, fast legato with and without vibrato, trills with and without vibrato

**Repetition performances:** Legato, portato, staccato, normal and crescendo

**Fast repetitions:** 16ths at 140 to 180, and 200 BPM

The velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements. The Patch information also lists the velocity layers in detail.

## Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But naturally, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

**Note:** the *Vienna Instruments PRO* player software also allows you to play polyphonic Interval performances.

## Matrix and Preset information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. VI PRO also allows you to define a MIDI Control for Preset keyswitching.

### Vienna Instruments (VI) and Vienna Instruments PRO (VI PRO) Matrices and Presets

This Collection contains different Matrices and Presets for the free *Vienna Instruments* Player software and for *Vienna Instruments PRO*, which features powerful functions for enhancing the “human” sound of your compositions, distributing voices, etc. While Matrices and Presets of the same name contain the same Patches and samples, the PRO versions make use of these functions to create a more lively and natural-sounding impression. Also, there are additional PRO Matrices which make use of the internal sequencer to create runs and arpeggios (see Appendix).

Please note that *Vienna Instruments PRO* Matrices and Presets do not appear in the “standard” *Vienna Instruments*’ file browser.

When using the *Vienna Instruments PRO* player, we strongly recommend loading the VI PRO Matrices and Presets, since only they make full use of the software's features.

## Pitch

For designating pitch, the Vienna Symphonic Library by default uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4; however, the *Vienna Instruments* Software allows you to set middle C to C3 or C5 if desired. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

# 52 Trumpet-Bb mute

## Patches

### 01 SHORT + LONG NOTES

Range: E3–F6



Staccato, portato short and long  
Sustained with normal, progressive, and without vibrato  
Marcato with vibrato  
Upward slides with and without vibrato  
Falls

### 01 TrBb-mu\_staccato

Range: F3–F6

Samples: 352

RAM: 22 MB

Staccato  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f

### 02 TrBb-mu\_portato\_short

Samples: 352

RAM: 22 MB

Portato, short  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f

### 03 TrBb-mu\_portato\_medium

Samples: 352

RAM: 22 MB

Portato, medium  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f

### 11 TrBb-mu\_sus\_Vib

Samples: 463

RAM: 28 MB

Sustained, with vibrato  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
Release samples  
AB switch: release normal/falls

### 12 TrBb-mu\_sus\_Vib-progr

Samples: 382

RAM: 23 MB

Sustained, with progressive vibrato  
3 velocity layers: 0–55 p; 56–108 mf; 109–127 f  
Release samples  
AB switch: release normal/falls

### 13 TrBb-mu\_sus\_Vib-marc

Samples: 227

RAM: 14 MB

Sustained, marcato, with vibrato  
2 velocity layers: 0–88 mp; 89–127 f  
Release samples  
2 Alternations  
AB switch: release normal/falls


### 14 TrBb-mu\_sus\_Vib-slide

Range: E3–D6

Samples: 258

RAM: 16 MB

Sustained, with vibrato, upward slide towards target note  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
Release samples  
AB switch: release normal/falls

<b>15 TrBb-mu_sus_noVib</b>	<b>Samples: 463</b>	<b>RAM: 28 MB</b>
Sustained, without vibrato 4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f Release samples AB switch: release normal/falls		
<b>16 TrBb-mu_sus_noVib-slide</b>	<b>Range: E3–D6</b>	<b>Samples: 258</b>
Sustained, without vibrato, upward slide towards target note 4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f Release samples AB switch: release normal/falls		
<b>21 TrBb-mu_falls</b>	<b>Range: E3–C#6</b>	<b>Samples: 51</b>
Falls towards target note 3 velocity layers: 0–55 p; 56–108 mf; 109–127 f		
<b>02 DYNAMICS</b>	<b>Range: E3–F6</b>	
Medium crescendo and diminuendo with vibrato, 1.5, 2, 3, and 4 sec. Strong crescendo and diminuendo, without vibrato, 1.5, 2, 3, and 4 sec. Crescendo-diminuendo with and without vibrato, 2, 3, 4, and 6 sec. Fortepiano, sforzato, sforzatissimo		
<b>01 TrBb-mu_dyn-me_Vib_1'5s (2/3/4)</b>	<b>Range: F3–F6</b>	<b>Samples: 88</b>
Medium crescendo and diminuendo, with vibrato, 1.5, 2, 3, and 4 sec. 2 velocity layers: 0–88 p-mf/mf-p; 89–127 mf-f/f-mf AB switch: crescendo/diminuendo		
<b>11 TrBb-mu_dyn-str_noVib_1'5s (2/3/4)</b>	<b>Samples: 44</b>	<b>RAM: 2 MB</b>
Strong crescendo and diminuendo, without vibrato, 1.5, 2, 3, and 4 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>21 TrBb-mu_pfp_Vib_2s (3/4/6)</b>	<b>Samples: 44</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo with vibrato, 2, 3, 4, and 6 sec. 2 velocity layers: 0–88 p; 89–127 f		
<b>31 TrBb-mu_pfp_noVib_2s (3/4/6)</b>	<b>Samples: 44</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo without vibrato, 2, 3, 4, and 6 sec. 2 velocity layers: 0–88 p; 89–127 f		
<b>41 TrBb-mu_fp</b>	<b>Samples: 66</b>	<b>RAM: 4 MB</b>
Fortepiano 1 velocity layer		
<b>42 TrBb-mu_sfz</b>	<b>Samples: 66</b>	<b>RAM: 4 MB</b>
Sforzato 1 velocity layer		

**43 TrBb-mu\_sffz****Samples: 66****RAM: 4 MB**

Sforzatissimo  
1 velocity layer

**03 FLATTER****Range: E3–F6**

Flutter tonguing, normal and crescendo

**01 TrBb-mu\_flutter****Samples: 44****RAM: 2 MB**

Flutter tonguing, sustained  
1 velocity layer  
Release samples

**02 TrBb-mu\_flutter\_cre****Samples: 22****RAM: 1 MB**

Flutter tonguing, crescendo  
1 velocity layer

**10 PERF INTERVAL****Range: E3–F6**

Legato with normal, progressive, and without vibrato  
Portamento tight and loose

**01 TrBb-mu\_perf-legato\_Vib****Samples: 951****RAM: 59 MB**

Legato, with vibrato  
Monophonic  
2 velocity layers: 0–88 p; 89–127 f  
Release samples  
AB switch: release normal/falls

**02 TrBb-mu\_perf-legato\_Vib4L****Samples: 1231****RAM: 76 MB**

Legato, with vibrato; sustains with 4 velocity layers  
Monophonic  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
Release samples  
AB switch: release normal/falls

**03 TrBb-mu\_perf-legato\_noVib****Samples: 1231****RAM: 76 MB**

Legato, without vibrato  
Monophonic  
4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
Release samples  
AB switch: release normal/falls

**04 TrBb-mu\_perf-legato\_Vib-progr****Samples: 1534****RAM: 95 MB**

Legato, with progressive vibrato  
Monophonic  
3 velocity layers: 0–55 p; 56–108 mf; 109–127 f  
Release samples  
AB switch: release normal/falls

**05 TrBb-mu\_perf-portamento\_tight****Samples: 1069 RAM: 66 MB**

Portamento, tight  
 Monophonic  
 2 velocity layers: 0–88 p; 89–127 f  
 Release samples  
 AB switch: release normal/falls

**06 TrBb-mu\_perf-portamento\_loose****Samples: 1069 RAM: 66 MB**

Portamento, loose  
 Monophonic  
 2 velocity layers: 0–88 p; 89–127 f  
 Release samples  
 AB switch: release normal/falls

**11 PERF INTERVAL FAST****Range: E3–F6**

Legato, fast, with and without vibrato

**01 TrBb-mu\_perf-legato\_Vib-fa****Samples: 1305 RAM: 81 MB**

Legato, fast, with vibrato  
 Monophonic  
 4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
 Release samples  
 AB switch: release normal/falls

**02 TrBb-mu\_perf-legato\_noVib-fa****Samples: 1305 RAM: 81 MB**

Legato, fast, without vibrato  
 Monophonic  
 4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
 Release samples  
 AB switch: release normal/falls

**12 PERF TRILL****Range: E3–F6**

Trills, minor and major 2nd, with and without vibrato

**01 TrBb-mu\_perf-trill\_Vib****Samples: 2415 RAM: 150 MB**

Trills, with vibrato, minor and major 2nd; all other intervals legato  
 Monophonic  
 4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
 Release samples  
 AB switch: release normal/falls

**02 TrBb-mu\_perf-trill\_noVib****Samples: 2415 RAM: 150 MB**

Trills, without vibrato, minor and major 2nd; all other intervals legato  
 Monophonic  
 4 velocity layers: 0–55 p; 56–88 mp; 89–108 mf; 109–127 f  
 Release samples  
 AB switch: release normal/falls

**13 PERF REPETITION****Range: E3–F6**

Legato, portato, staccato  
Normal and crescendo

**01 TrBb-mu\_perf-rep\_leg****Samples: 330****RAM: 20 MB**

Legato repetitions  
3 velocity layers: 0–55 p; 56–108 mf; 109–127 ff

**02 TrBb-mu\_perf-rep\_por****Samples: 594****RAM: 37 MB**

Portato repetitions  
3 velocity layers: 0–55 p; 56–108 mf; 109–127 ff

**03 TrBb-mu\_perf-rep\_sta****Samples: 594****RAM: 37 MB**

Staccato repetitions  
3 velocity layers: 0–55 p; 56–108 mf; 109–127 f

**10 TrBb-mu\_perf-rep\_cre5\_leg****Samples: 110****RAM: 6 MB**

Legato crescendo, 9 repetitions  
1 velocity layer

**11 TrBb-mu\_perf-rep\_cre9\_por****Samples: 198****RAM: 12 MB**

Portato crescendo, 9 repetitions  
1 velocity layer

**12 TrBb-mu\_perf-rep\_cre9\_sta****Samples: 198****RAM: 12 MB**

Staccato crescendo, 9 repetitions  
1 velocity layer

**14 FAST REPETITION****Range: E3–F6**

Staccato repetitions at 140 to 180, and 200 BPM

**01 TrBb-mu\_fast-rep\_140 (150/160/170/180/200)****Samples: 132****RAM: 8 MB**

Staccato, 16 repetitions  
16ths at 140 to 180, and 200 BPM  
3 velocity layers: 0–55 p; 56–108 mf; 109–127 ff  
Release samples

**99 RELEASE**

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments Matrix – you will not be able to hear anything when you try to play them.



# Matrices

## Matrix - A Standard-Advanced

### 01 TrBb-mu Articulation Combi

Samples: 2350 RAM: 146 MB

Staccato, portato short and medium  
Sustained with normal, without, and with progressive vibrato  
Fortepiano, sforzato, sforzatissimo  
Flutter tonguing normal and crescendo

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1
V1	staccato	sus vibrato	fortepiano	flutter normal
V2	portato short	sus no vibrato	sforzato	flutter crescendo
V3	portato medium	sus prog. vibrato	sforzatissimo	flutter crescendo

### 02 TrBb-mu Perf-Legato Speed

Samples: 3172 RAM: 198 MB

Legato with normal, progressive, and without vibrato, tight portamento  
Fast legato with and without vibrato  
Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones Vertical: Modwheel, 4 zones

	slow	fast
V1	legato vibrato	legato fast vib.
V2	legato no vibrato	legato fast no vib.
V3	legato prog. vibrato	legato fast vib.
V4	portamento tight	%

### 03 TrBb-mu Perf-Trill Speed

Samples: 4282 RAM: 267 MB

Legato with normal, progressive, and without vibrato, tight portamento  
Trills with and without vibrato  
Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones Vertical: Modwheel, 4 zones

	slow	fast
V1	legato vibrato	trills vib.
V2	legato no vibrato	trills no vib.
V3	legato prog. vibrato	trills vib.
V4	portamento tight	%

### 04 TrBb-mu Short+Long notes

Samples: 2225 RAM: 139 MB

Staccato, portato short and medium  
Sustained without, with normal and progressive vibrato, and marcato  
Slides, sustained with and without vibrato  
Falls

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1
V1	staccato	sus vibrato	sus no vibrato	falls
V2	portato short	sus marcato vibrato	sus prog. vibrato	falls
V3	portato medium	sus slide vibrato	sus slide no vib.	falls

**05 TrBb-mu Dynamics****Samples: 1078 RAM: 67 MB**

Dynamics

Medium and strong crescendo and diminuendo, 1.5, 2, 3, and 4 sec.

Crescendo-diminuendo, 2, 3, 4, and 6 sec.

Fortepiano, sforzato, sforzatissimo

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 5 zones

	C1	C#1	D1	D#1
dyn.medium	1.5 sec.	2 sec.	3 sec.	4 sec.
dyn.strong	1.5 sec.	2 sec.	3 sec.	4 sec.
pfp vib.	2 sec.	3 sec.	4 sec.	6 sec.
pfp no vib.	2 sec.	3 sec.	4 sec.	6 sec.
sfz	fp	sfz	sfz	sfz

**Matrix - B Repetitions****11 TrBb-mu Perf-Repetitions - Combi****Samples: 1518 RAM: 94 MB**

Repetition performances: Legato, portato, staccato

**Matrix switches:** Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
repetitions	legato	portato	staccato

**12 TrBb-mu Perf-Repetitions - Speed****Samples: 1518 RAM: 94 MB**

Repetition performances: Legato, portato, staccato

Speed controller

**Matrix switches:** Horizontal: Speed, 3 zones

	H1	H2	H3
repetitions	legato	portato	staccato

**13 TrBb-mu Fast-Repetitions****Samples: 462 RAM: 28 MB**

Fast repetitions, 140 to 180, and 200 BPM

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
speed/BPM	140	150	160	170	180	200

## Presets

### 01 TrBb-mu Preset VIPRO

Samples: 7682   RAM: 480 MB

Matrices:

01\_basic

11 repetitions, 12 repetitions-Dyn

21 runs+phr key, 22 runs+phr whl, 23 runs+phr chr

31 perf-trills

Matrix keyswitches: C2-F2, A2

### TrBb-mu VSL Preset

Samples: 7582   RAM: 473 MB

Matrices:

02 Perf-Legato Speed, 03 Perf-Trill Speed,

01 Articulation Combi,

11 Perf-Repetitions-Combi,

13 Fast-Repetitions

Matrix keyswitches: C2-D#2, F2

## Appendix – Vienna Instruments PRO Matrices and Presets

### General Information

All Vienna Instruments PRO Presets and Matrices have been saved with their cells disabled. This way you can load them quickly to analyze the various loaded Presets and Matrices.

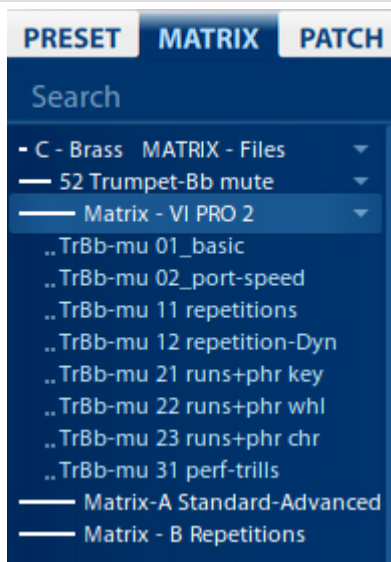
If you activate “Force Enabled ON” in the Settings Menu, these Presets and Matrices will be loaded with enabled cells.



### Single Instrument Matrices

There are special folders for Vienna Instruments PRO in the Matrix list of all String and Wind Instruments:

#### “MATRIX – VI PRO 2”



These folders hold up to 17 new Matrices.

Matrices from 01–09 are “conventional” matrices, without the internal APP Sequencer activated.

Matrix 11 and higher contain sequence-based Matrices.

## **“01\_basic” – The Allround Matrix**

Available for all String and Wind Instruments.

A collection of the most essential articulations of the given instrument, with up to 40 different patches.

The Patches have been assembled from the Standard & Extended Library content of each Vienna Instruments Collection, but of course these Matrices are also available if you only have a license for the Standard Library of your Collection. The Patches that are not available will appear with a red background in the Matrix Cells and in the Slot Rack.

**X-Axis Controller (horizontal):** Keyswitches

For Bass to Soprano Instruments (lowest note C2): C1 upwards

For Contra Bass Instruments (lowest notes below C2): C6 upwards

Use these Keyswitches to change between main categories of Patches like short notes, sustains and Performance Intervals.

**Y-Axis Controller (vertical):** CC1 (ModWheel)

Use the ModWheel to access different variations of a main category, e.g., sustains: with and without vibrato, with progressive vibrato.

### **Cell Configuration:**

- C Short Single Note samples (staccato, détaché, portato)
- C# Sustains (with/without vibrato)
- D Dynamic Single Notes (fortepiano, sforzando, sforzantissimo)
- D# Performance Intervals (legato, trills, marcato, portamento)
- E Performance Repetitions (legato, portato, staccato, spiccato, harsh)
- F Fast Repetitions (in different tempos)
- F# Tremolo, flutter tongue, recorded trills
- G pizzicato, col legno (strings only)
- G# Harmonics (strings only)
- A Ponticello (strings only)

The configuration of individual Cells has been designed to be interchangeable throughout all instruments; e.g., a staccato will always be found in the same Cell position, irrespective of whether you are using a string or a wind instrument. This allows a quick change of instruments in your arrangement.

## **“02\_leg-speed” (resp. “port-speed”) – Tweakable Intervals**

Available for all String and Woodwind Instruments, as well as for Brass Instruments with Glissando/Portamento Patches.

The new Enveloped Stretching tools in Vienna Instruments PRO 2 allow you to control the transition length of Performance Interval Patches in real-time.

**Attention:** Loading or “enabling” these matrices for the first time will cause some delay due to the necessary rendering time.

**X-Axis Controller (horizontal):** Keyswitches

For Bass to Soprano Instruments (lowest note C2): C1 upwards

For Contrabass Instruments (lowest notes below C2): C6 upwards

Use these Keyswitches to change between different Performance Interval Patches (legato, portamento, glissando).

**Y-Axis Controller (vertical):** CC1 (ModWheel)

Use the ModWheel to access different transition lengths for the Performance Interval Patches.

- CC1 = 1 Slow transitions
- CC1 = 64 Regular transitions
- CC1 = 127 Fast transitions

## **“11 repetitions” – Repetitions without restrictions**

Available for all String and Wind Instruments.

An APP Sequencer based Matrix with Host Tempo Sync activated by default.

**X-Axis Controller (horizontal):** Articulations/Patches are assigned in the APP Sequencer (Cell Tab)

**Y-Axis Controller (vertical):** Keyswitches

For Bass to Soprano Instruments (lowest note C2): C1 upwards

For Contrabass Instruments (lowest notes below C2): C6 upwards

The variations available in the Y-Axis are generally sequences assembled from one or 2 different articulations. For Strings, these are spiccato and staccato Performance Repetitions. For Wind Instruments, these are portato and staccato Performance Repetitions.

You can access up to 12 different pre-programmed patterns:

<b>Slot 1</b>	<b>“16th”</b>	16th notes based on one articulation.
<b>Slot 2</b>	<b>“16 2mc”</b>	16th notes based on two different articulations, accents are achieved by using the “longer” articulation.
<b>Slot 3</b>	<b>“16 mc”</b>	16th notes based on two different articulations, accents are achieved by using 2 “longer” articulations.
<b>Slot 4</b>	<b>“up 2”</b>	Sequence of one 8th note and two 16th notes.
<b>Slot 5</b>	<b>“up 1”</b>	Upbeats, sequence of one 8th note and one 16th note.
<b>Slot 6</b>	<b>“16 a3”</b>	Sequence of three 16th notes and one 16th rest.
<b>Slot 7</b>	<b>“triplet”</b>	8th triplets based on one articulation.
<b>Slot 8</b>	<b>“trip mc”</b>	8th triplets based on two different articulations, accents are achieved by using the “longer” articulation.
<b>Slot 9</b>	<b>“trip mc2”</b>	8th triplets based on two different articulations, every quarter beat is accentuated by using the “longer” articulation.
<b>Slot 10</b>	<b>“trip up1”</b>	Triplet Upbeats
<b>Slot 11</b>	<b>“Phrase A”</b>	Example 1 of a combination of different articulations.
<b>Slot 12</b>	<b>“Phrase B”</b>	Example 2 of a combination of different articulations.

## “12 repetition-Dyn” – Dynamite Dynamics

Available for all String and Wind Instruments with perf-repetition\_dyn Patches.

An APP Sequencer based Matrix with Host Tempo Sync activated by default.

**X-Axis Controller (horizontal):** Articulations/Patches are assigned in the APP Sequencer (Cell Tab)

The available patterns are based on Performance Repetition Patches. The different volumes of the contained notes are as originally recorded and are NOT triggered by MIDI velocity.

There are up to 9 different volume levels available for every recorded dynamic repetition pattern.

**Y-Axis Controller (vertical):** Keyswitches

For Bass to Soprano Instruments (lowest note C2): C1 upwards

For Contrabass Instruments (lowest notes below C2): C6 upwards

The available variations are different successions of crescendo and diminuendo repetition patterns in 16th notes.

<b>Slot 1</b>	<b>“cre-dim”</b>	Sequence of eight 16th notes from pp–ff, followed by eight 16th notes from ff–pp
<b>Slot 2</b>	<b>“dim-cre”</b>	Sequence of eight 16th notes from ff–pp, followed by eight 16th notes from pp–ff
<b>Slot 3</b>	<b>“cr-di sh”</b>	Sequence of four 16th notes from pp–ff, followed by 4 16th notes from ff–pp
<b>Slot 4</b>	<b>“di-cr sh”</b>	Sequence of four 16th notes from ff–pp, followed by four 16th notes from pp–ff
<b>Slot 5</b>	<b>“cre step”</b>	A series of 4 sequences, each with 4 16th notes, starting with pp. Every following sequence starts at the next higher volume from the preceding one.
<b>Slot 6</b>	<b>“dim step”</b>	A series of 4 sequences, each with 4 16th notes, starting with ff. Every following sequence starts with the next lower volume from the preceding one.
<b>Slot 7</b>	<b>“accent A”</b>	A series of 4 sequences, each with 4 16th notes, with an accentuation on the quarter beat and crescendos towards the accentuated notes.
<b>Slot 8</b>	<b>“accent B”</b>	A series of 4 sequence parts, each with 4 16th notes, with an accentuation on the quarter beat and strong crescendos towards the accentuated notes.
<b>Slot 9</b>	<b>“Phrase A”</b>	Example 1 of a combination of different articulations.
<b>Slot 10</b>	<b>“Phrase B”</b>	Example 2 of a combination of different articulations.
<b>Slot 11</b>	<b>“Phrase C”</b>	Example 3 of a combination of different articulations.
<b>Slot 12</b>	<b>“Phrase D”</b>	Example 4 of a combination of different articulations.

## “21 runs+phr key” – Diatonic Runs & Phrases

Available for all String and Wind Instruments.

An APP Sequencer based Matrix with Host Tempo Sync activated by default.

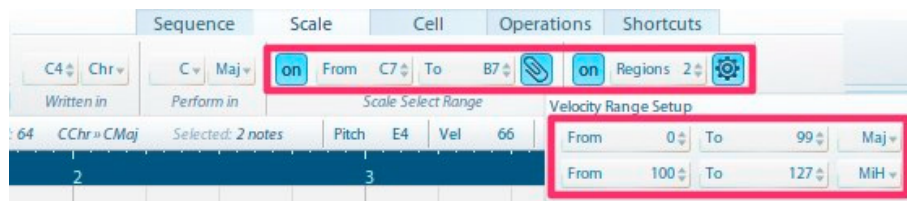
Selection of 12 Scales from C major/minor to B major/minor by Keyswitches C7–B7 (except Piccolo Flute: C3–B3).

Change between major and minor harmonic scales by Velocity Switch:

Velocity 0–99: Major scale

Velocity 100–127: Minor harmonic scale

**Attention:** If this Matrix is loaded into an empty preset on its own, the “Scale Select Range” and “Velocity Switch” functions in the APP sequencer (Scale Tab) must be activated.



**X-Axis Controller (horizontal):** Articulations/Patches are assigned in the APP Sequencer (Cell Tab). The major part of the patches used is based on Performance Fast Legatos, and Slurred Fast Legatos for most string ensembles.

**Y-Axis Controller (vertical):** Keyswitches

For Bass to Soprano Instruments (lowest note C2): C1 upwards

For Contrabass Instruments (lowest notes below C2): C6 upwards

The available variations in the Y-Axis consist of upwards and downwards runs and phrases in different lengths.

<b>Slot 1</b>	<b>“Oct up”</b>	Diatonic run upwards, 1 octave
<b>Slot 2</b>	<b>“Oct do”</b>	Diatonic run downwards, 1 octave
<b>Slot 3</b>	<b>“Oct ac-u”</b>	Diatonic run upwards, 1 octave, with a slight accelerando
<b>Slot 4</b>	<b>“Oct ac-d”</b>	Diatonic run downwards, 1 octave, with a slight accelerando
<b>Slot 5</b>	<b>“2 Oct up”</b>	Diatonic run upwards, 2 octaves
<b>Slot 6</b>	<b>“2 Oct do”</b>	Diatonic run downwards, 2 octaves
<b>Slot 7</b>	<b>“Quint up”</b>	Diatonic run upwards, 1 fifth
<b>Slot 8</b>	<b>“Quint do”</b>	Diatonic run downwards, 1 fifth
<b>Slot 9</b>	<b>“Phr A up”</b>	Progressive phrase upwards (step by step) with a repetition note, 1 octave.
<b>Slot 10</b>	<b>“Phr A do”</b>	Progressive phrase downwards (step by step) with a repetition note, 1 octave.
<b>Slot 11</b>	<b>“Phr B up”</b>	Progressive “mordent phrase” upwards (step by step), 1 octave.
<b>Slot 12</b>	<b>“Phr B do”</b>	Progressive “mordent phrase” downwards (step by step), 1 octave.

## “22 runs+phr whl” – Whole-tone Runs & Phrases

Like Matrix “21 runs+phr key”, but based on whole-tone scales.

## “23 runs+phr chr” – Chromatic Runs & Phrases

Like Matrix “21 runs+phr key”, but based on chromatic scales.



### “31 perf-trills” – Thrilling Trills

Available for all String and Wind Instruments with Performance Trill Patches.

An APP Sequencer based Matrix with Host Tempo Sync NOT activated by default. Trill speed can be set directly in the APP sequencer’s “Sequence” tab.

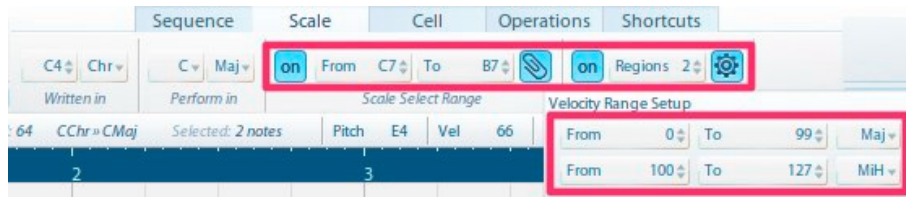
Selection of 12 Scales from C major/minor to B major/minor by Keyswitches C7–B7 (except Piccolo Flute: C3–B3).

Change between major and minor harmonic scales by Velocity Switch:

Velocity 0–99: Major Scale

Velocity 100–127: Minor Harmonic Scale

**Attention:** If this Matrix is loaded into an empty preset on its own, the “Scale Select Range” and “Velocity Switch” functions in the APP sequencer (Scale Tab) must be activated.



**X-Axis Controller (horizontal):** Articulations/Patches are assigned in the APP Sequencer (Cell Tab). The major part of the Patches used is based on Performance Trill Patches.

**Y-Axis Controller (vertical):** Keyswitches

For Bass to Soprano Instruments (lowest note C2): C1 upwards

For Contrabass Instruments (lowest notes below C2): C6 upwards

The available variations in the Y-Axis consist of trills in different speeds, accelerating or decelerating, plus a variety of mordents and inverted mordents (“Pralltriller”).

Slot 1	“trill”	Trill, middle tempo.
Slot 2	“trill ac”	Trill, accelerating.
Slot 3	“trill fa”	Trill, fast tempo.
Slot 4	“trill ri”	Trill, decelerating.
Slot 5	“mord up1”	Embellishment, starting with upwards note.
Slot 6	“mord do1”	Embellishment, starting with downwards note.
Slot 7	“mord up2”	Embellishment, starting with two upwards notes.
Slot 8	“mord up2+”	Embellishment, starting with two upwards notes (variation).
Slot 9	“mord do2”	Embellishment, starting with two downwards notes.
Slot 10	“mord do2+”	Embellishment, starting with two downwards notes (variation).
Slot 11	“Prall up”	Inverted mordent (“Pralltriller”) upwards
Slot 12	“Prall do”	Inverted mordent (“Pralltriller”) downwards